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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/560,122	04/28/2000	Too Yew Teng	1961-00100	3390

23505 7590 02/25/2004

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EXAMINER

VUONG, BACH Q

ART UNIT PAPER NUMBER

2653

DATE MAILED: 02/25/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/560,122

Applicant(s)

TENG ET AL

Examiner

Bach Q Vuong

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1,3,4,8-11,13 and 15-46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,3,4,8-11,15-17 and 24-36 is/are allowed.
- 6) ☒ Claim(s) 18-23 and 37-46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

This communication is responsive to an amendment filed on 01/08/04

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 18-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Shimono et al. (JP 09281054 A).

Shimono et al., according to Figs. 1-7 and 11, shows an apparatus for detecting cracks in optical discs comprising all features of the claimed invention.

Regarding claim 18, see Figs. 2-7 and 11 which show a systems for detecting cracks in optical discs which is having an outer edge and an inner edge comprising: a disc drive for spinning the optical disc (see rotating unit 51, in Fig. 2); at least one transmitter (see laser source 2) for propagating a light signal through the optical disc; at least one receiver (see Defect detection 52-54) for receiving for receiving the light emerging from the disc; and a microcontroller (see control surface in Abstract of JP 09281054 A) coupled to the receiver for analyzing received light signals.

Regarding claim 19, see Figs. 2, 6 and 11 which show a systems for detecting cracks in optical discs wherein the receiver (see defect detection 54) is adapted to receive unreflected propagated signals emerging from the disc.

Regarding claim 20, see Fig. 7 which show a systems for detecting cracks in optical discs wherein the receiver is adapted to receive propagated signals reflected by at least one crack in the disc.

Regarding claim 21, see Figs. 2-7 and 11 which show an optical disc drive comprising a traverse mechanism for spinning the disc and retrieving information from the disc, a loader

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mechanism for loading the disc onto traverse mechanism, and a crack detection mechanism, comprising: a transmitter (see laser source 2) positioned below the optical disc for propagating a light signal through the interior of the spinning optical disc; a receiver (see defect inspecting unit 52-54) mounted on the disc drive and having a light sensor positioned to receive the light signal emerging from the disc; and a microcontroller (see control surface in Abstract of JP 09281054 A) coupled to the receiver for analyzing received light signals.

Regarding claims 21 and 23, see the rejections applied to claim 19 and 20 above.

Allowable Subject Matter

Claims 37-46 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 37-46 are allowable over the prior art of record because all the references in the record, considered as closest references and viewed in combination or individually, fails to suggest or fairly teach a system for detecting cracks in optical discs including combination of all limitations as recited in each of claims 37 and 42. Claims 38-41 and 43-46 are allowed with their respective parent claim.

Claims 1,3,4, 8-11, 13, 15-17, 24-36 are allowed.

Response to Arguments

Applicant's arguments with respect to claimed invention have been considered but are moot in view of the new ground(s) of rejection.

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Cited References

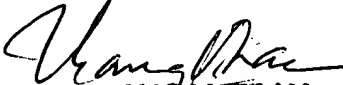
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited references relate to an apparatus and method for detecting crack on an optical discs.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bach Q Vuong whose telephone number is (703) 305-7355. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on (703) 305-6137. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BV
February 22, 2004


THANG V. TRAN
PRIMARY EXAMINER